

**REMARKS**

In accordance with the foregoing, claim 1 is amended. No new matter is being presented and approval and entry are requested.

Claims 1, 3-11, 13, 17 and 20 are pending and under consideration. Reconsideration is requested.

**Claim Amendments**

Claim 1 is herein to include recite a mobile device including "...each of said plurality of first communications distribution units comprises a same storage contents of distribution destination storage unit storing an address of any of said plurality of second communications distribution units." (Amendatory language being underlined).

Support for the amendment is found, for example, on page 44, lines 5-18 of the specification.

No new matter is being presented, and approval and entry are respectfully requested.

**Item 2: Rejection of claim 1 under 35 U.S.C. §112, second paragraph**

In item 1 of the Office Action, the Examiner rejects claim 1 under 35 U.S.C. §112, second paragraph as being indefinite, and asserts:

Claim 1 recites the limitation "contents of distributing destination storage unit storing any of said plurality of second communications distribution units" beginning in line 19. It is unclear what is "distributing destination storage unit"? there is no mention of it in the specification. Is it a hardware device? If so, how can it store "any of said plurality of second communications distribution units," another device. Storage devices store information or data, not hardware units.

(Action at page 2).

Claim 1 is herein to include recite a mobile device including "...each of said plurality of first communications distribution units comprises a same storage contents of distribution destination storage unit storing an address of any of said plurality of second communications distribution units, (amendatory language being underlined)" to address the Examiner's concern.

Applicants submit that claim 1 complies with 35 U.S.C. §112, second paragraph. Thus, withdrawal of the rejection is requested.

**Items 4-6: Rejection of claims 1, 3-9 and 20 under 35 U.S.C. §103(a) as being unpatentable over applicant's Admitted Prior Art ("APA") in view of combinations of Tomoike (Pub. No. US 2001/0055285), Kerr (Pub. No. US 2005/0027506), and Goldszmidt et al. (U.S.P. 6,195,680)**

In items 4-6 of the Office Action, the Examiner rejects independent claims 1 and 20 (and dependent claims 3-9) under 35 U.S.C. §103(a) as being unpatentable over APA in view of

combinations of Tomoike, Kerr, and Goldszmidt. (Action at pages 3-13). The rejection is traversed.

Applicants submit features recited by each of independent claims 1 and 20 (and thus dependent claims) are not taught by the art relied on by the Examiner, alone or in *arguendo* combination. Independent claim 1 recites a mobile device communications system which has a plurality of service providing servers, and is used for communications by a mobile terminal including:

- a) "a first network unit which is connected to the mobile terminal and has a plurality of input/output points to and from the service providing servers;"
- b) "a plurality of first communications distribution units respectively connected to the plurality of input/output points;"
- c) "a second network unit connected to said plurality of first communications distribution units;"
- d) "a third network unit connected to the plurality of service providing servers;" and
- e) "a plurality of second communications distribution units which are connected between said second network unit and said third network unit, for distributing a series of communications between the mobile terminal and any of the plurality of service providing servers to any of the plurality of service providing servers, " and where
  - f) "said first communications distribution unit distributes said series of communications between said mobile terminal and any of said plurality of service providing servers to any of said plurality of second communications distribution units through said second network unit," wherein
    - g) "each of said plurality of first communications distribution units comprises a same storage contents of distribution destination storage unit storing an address of any of said plurality of second communications distribution units to which a series of communications are to be distributed corresponding to an identifier of a session as the series of communications between the mobile terminal and the service providing servers. (emphasis added)" Claim 20 has a similar recitation.

That is, according to an embodiment of the present invention, a same path for packets is set by distributing a series of communications to the same second communications distribution unit and the same service providing server so that it is possible to maintain a TCP connection.

The Action concedes that the APA does not teach:

the series of communications is distributed to any of said plurality of second communications distribution units. The APA also does not disclose that each of said plurality of first communications distribution units comprises a same storage contents of distribution destination storage unit storing any of said plurality of

second communications distribution units.

(Action at page 7).

But, the Examiner asserts Tomoike teaches:

based on the load data management table of the load data storage device 32 one of the proxy gateways 18-1 to 18-n (claimed second communications distribution units) which is connected to the mobile terminal 12 is selected (para. 63). Tomoike further discloses that a session is engaged between the selected gateway and the mobile terminal, which is connected to contents server 19 (para. 39 and 63). Tomoike still further discloses that if the load data sent from each of the proxy gateways 18-1 to 18-n indicates the measured load value, one of the proxy gateways 18-1 to 18-n which has the smallest load value is selected and when none of the GMMS 17-1 to 17-m (claimed first communications distribution units) receives the address of the proxy gateway (claimed second communications distribution units) selected by the SCP 16 among the proxy gateways 18-1 to 18-n, the GMMS performs a process of connecting the selected proxy gateway and the mobile terminal 12 (para. 64-65). . . . obvious . . . to modify the common load balancing system as disclosed by the applicant as admitted prior art to include a service control point that selects one of the proxy gateways and to include a load data obtaining device and load data storage device as taught by Tomoike. . . . motivated to make the combination so that the load of the gateways can always be equally distributed (Tomoike, para. 20).

(Action at pages 7-8).

That is, the Examiner asserts that Tomoike teaches that since one of the gateways has the smallest load value, a connection process between a mobile terminal and a gateway can be performed if the address of the gateway having its GMMS selected by an SCP is always received.

Applicants point out that while a specific gateway can be selected during a communication if this specific gateway always has the smallest load during a communication connection, but according to an embodiment of the present invention, however, the address of any of the second communications distribution units to which a series of communications are distributed is stored corresponding to the identifier of the session as a series of communications.

By contrast, the APA merely teaches a user session. Further, Tomoike merely teaches that communications are distributed corresponding to the load of a gateway.

Thus, Applicants submit that even an *arguendo* combination of the art relied on by the Examiner does not teach features recited by independent claims 1 and 20.

Further, according to an embodiment of the present invention, a plurality of first communications distribution units respectively comprise the same storage contents of distribution a destination storage unit.

By contrast, Tomoike does not teach (thus neither an *arguendo* combination of the art relied on by the Examiner) gateways that comprise a distribution destination storage unit. Nothing in the teaching of Kerr overcomes these deficiencies in the teaching of the art relied on.

Applicants submits this traversal meets the Consideration of Applicant's Rebuttal Evidence Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* of October 3, 2007 and the elements in combination do not merely perform the function that each element performs separately, and the results of the claimed combination were unexpected.

### **Summary**

Since features recited by independent claims 1 and 20 are not taught by even a combination of the art relied on by the Examiner, the rejection should be withdrawn and claims 1, 3-9 and 20 allowed.

### **Item 5: Rejection of claim 17 under 35 U.S.C. §103(a) as being unpatentable over APA in view Tomoike and Kerr**

In item 5 of the Office Action, the Examiner rejects claim 17 under 35 U.S.C. §103(a) as being unpatentable over APA in view Tomoike and Kerr. (Action at pages 9-11). The rejection is traversed.

Claim 17 recites a computer-readable portable storage medium stores a program used to direct the computer to perform operations including "retrieving from a packet received from the load balancer a destination address and a source address of the packet when a series of communications between the mobile terminal and the service providing server start, and setting the addresses in an accounting record; incrementing a number of packets of an accounting record each time a packet is received from the load balancer until the series of communications terminate, retrieving a packet length from the received packet, and adding the packet length to the packet length of the accounting record; and setting again the source address of the accounting record into identification information about a user of the mobile terminal, and the destination address into information about the service providing server."

That is, according to an embodiment of the present invention, the program stores operations including performing an accounting process at a gateway located between a load balancer and a service providing server.

The Action concedes that the APA does not teach:

setting the addresses in an accounting record, incrementing a number of packets of an accounting record each time a packet is received from the load balancer until the series of communications terminate, retrieving a packet length from the

received packet, and adding the packet length to the packet length of the accounting record, and setting again the source address of the accounting record into identification information about a user of the mobile terminal, and the destination address into information about the service providing server.

(Action at page 10).

But, the Examiner asserts that:

Kerr discloses treatment of packets 150 in the message flow 160 including accounting such that the routing device 140 creates an accounting record for the message flow 160 (para. 36). Kerr further discloses that the message flow may be identified responsive to factors including packet length (para. 25). Kerr still further discloses that because the routing device 140 is able to associate each packet 150 with a particular message flow 160 and to associate each message flow 160 with particular network-layer source and destination addresses, the routing device 140 is able to associate network usage with particular workstations (and therefore with particular users) or with particular services available on the network. This can be used for accounting purposes (para. 46). . . . obvious . . . to modify the common load balancing system as disclosed by the applicant as prior art to include the ability to access servers external to the mobile device communications system as taught by Tomoike and to include accounting record feature as taught by Kerr. . . . been motivated to make the combination so that the user can be accurately charged for the use of content and network usage (Kerr, para. 46).

(Action at pages 10-11).

Applicants submit that even given the Examiner's assertions *arguendo* combination of the art relied on by the Examiner does not teach a program that stores operations including performing an accounting process at a gateway located between a load balancer and a service providing server, as recited by claim 17.

Applicants elements in combination do not merely perform the function that each element performs separately, and the results of the claimed combination were unexpected.

### **Summary**

Since features recited by claim 17 are not taught by even a combination of the art relied on by the Examiner, the rejection should be withdrawn and claim 17 allowed.

### **Item 6: Rejection of claims 10-11 under 35 U.S.C. §103(a) as being unpatentable over APA in view Tomoike further in view of Goldszmidt**

In item 6 of the Office Action, the Examiner rejects independent claim 10 (and dependent claim 11) under 35 U.S.C. §103(a) as being unpatentable over APA in view Tomoike and Goldszmidt. (Action at pages 13-15). The rejection is traversed.

Independent claim 10 recites a mobile device communications method for use with a plurality of service providing servers for communications by a mobile terminal including:

- a) "the mobile terminal transmitting a packet in a series of communications by specifying

any of the plurality of service providing servers;"

b) "a load balancer, which received the packet, distributing the packet to any of the plurality of packet gateway devices corresponding to an identifier for the series of communications;" and

c) "said packet gateway device which was assigned the packet distributing the packet to any of the plurality of service providing servers performing the same services as the service providing server specified by the mobile terminal. (emphasis added)"

Applicants submit features recited by independent claims 10 (and dependent claim 11) are not taught by the art relied on by the Examiner, alone or in *arguendo* combination. The Action concedes that

The APA does not disclose distributing the packet to any of the plurality of packet gateway devices corresponding to an identifier for the series of communications.

(Action at page 14).

In both the current Office Action and the previous Office Action mailed June 21, 2007 ("previous Office Action), the Examiner asserts:

Tomoike discloses that one of the proxy gateways 18-1 to 18-n, which is connected to the mobile terminal 12 is selected (para. 63). Goldszmidt discloses that control server 1.1 could be a gateway through which client requests must pass and which includes a routing function to distribute client requests among servers in the cluster (col. 4, lines 55-58). Goldszmidt further discloses that the control server assigns different identifiers to the streaming servers for delivering the multimedia data (col. 5, lines 38-42). . . . obvious . . . to modify the common load balancing system as disclosed by the applicant as prior art to use gateways of Tomoike and assign identifiers to the streaming servers as taught by Goldszmidt. . . . motivated to make the combination so that the load of the gateways can always be equally distributed (Tomoike, para. 20) and so that the identifiers can be used to group the streaming servers into two or more different sets (Goldszmidt, col. 5, lines 38-42).

(Emphasis added, current Office Action at pages 14-15, Previous Office Action at pages 15-16).

That is, the Examiner relies on Goldszmidt's disclosure on col. 5, lines 38-42).as teaching control server assigns different identifiers to the streaming servers for delivering the multimedia data.

In the previous Amendment filed September 21, 2007 (previous amendment), Applicants traversed the rejection of claims 10-11, arguing that even an *arguendo* combination does not teach recited features, since by contrast, Goldszmidt merely teaches:

The control server assigns different identifiers to the streaming servers for delivering the multimedia data, and uses these identifiers to group these

streaming servers into two or more different sets. The streaming servers are used to deliver the real-time multimedia streams to the client agents. To receive a multimedia stream, client agents are given an identifier to connect to a server in one of the sets.

(see, for example, col. 3, lines 27-60).

In the previous Amendment, Applicants submitted that Goldszmidt merely teaches a technique in which different identifiers are assigned to streaming servers, and when a client detects a fault in a server, the influence on the streaming can be minimized and the streaming can be continued, by connecting to a secondary server having an identifier paired with the server with the fault and "assigning different identifiers to streaming servers," and thus Goldszmidt does not teach distributing the packet to any of the plurality of packet gateway devices corresponding to an identifier for the series of communications.

But, in the current Office Action in the section entitled "Response to Arguments," the Examiner asserts:

Tomoike discloses that a session is engaged between the selected gateway and the mobile terminal, which is connected to contents server 19 (para 39 and 63). Tomoike still further discloses that if the load data sent from each of the proxy gateways 18-1 to 18-n indicates the measured load, value, one of the proxy gateways 18-1 to 18-n which has the smallest load value is selected and when one of the GMMS 17-1 to 17-m (claimed first communications distribution units ) receives the address for the proxy gateway (claimed second communications distribution units) selected by the SCP 16 among the proxy gateways 18-1 to 18-n, the GMMS performs a process of connecting the selected proxy gateway and the mobile terminal 12(para. 64-65).

(Action at page 18).

But, even *arguendo* given the Examiner's assertions regarding Tomoike, for example, that "one of the proxy gateways 18-1 to 18-n which has the smallest load value is selected" and the Examiner's assertions regarding Goldszmidt, for example, as teaching an assigning of "different identifiers to the streaming servers for delivering the multimedia data," Applicants respectfully submit that such an *aguendo* combination merely teaches distributing a packet and assigning an identifier and does not teach "distributing the packet to any of the plurality of packet gateway devices corresponding to an identifier for the series of communications," as recited by claim 10.

### **Summary**

Since features recited by independent claim 10 (and dependent claim 11) are not taught by even a combination of the art relied on by the Examiner, the rejection should be withdrawn and claims 10-11 allowed.

**Item 7: Rejection of claim 13 under 35 U.S.C. §103(a) as being unpatentable over APA in view of Attanasio (U.S.P. 5,371,852) and Goldszmidt**

In item 7 of the Office Action, the Examiner rejects claim 13 under 35 U.S.C. §103(a) as being unpatentable over APA in view of Attanasio, and further in view of Goldszmidt. (Action at pages 16-17). The rejection is traversed.

Claim 13 recites a computer-readable portable storage medium including "storing a destination address and a source address of a packet received from the load balancer using a unique source port number as a key; setting the unique source port number as a source port number of a packet header; selecting any of a plurality of service providing servers capable of providing a service requested by the mobile terminal from among the plurality of service providing servers such that the loads of the service providing servers can be balanced; and transmitting a packet to the service providing server with an address of the selected service providing server set as a destination address, and an address of the device set as a source address, wherein an identifier for a user session as a series of communications in a layer higher than a layer corresponding to a session as a series of communications between the mobile terminal and the service providing server in a hierarchical structure of communications is used as the unique source port number (emphasis added)."

Applicants submit that none of the art relied on by the Examiner, alone or in *arguendo* combination teach or suggest a medium including using an identifier as a source port number to a user session as a series of communications.

The Action concedes that the APA does not teach:

storing a destination address and a source address of a packet received from the load balancer using a unique source port number as a key and setting the unique source port number as a source port number of a packet header, and transmitting a packet to the service providing server with an address of the selected service providing server set as a destination address, and an address of the device set as a source address. The APA also does not disclose an identifier for a user session as a series of communications in a layer higher than a layer corresponding to a session as a series of communications between the mobile terminal and the service providing server in a hierarchical structure of communications is used as the unique source port number.

(Action at page 16).

But, the Examiner asserts it would have obvious:

to modify the common load balancing system as disclosed by the applicant as prior art to use an upper layer protocol such as HTTP and to assign identifiers to the streaming servers as taught by Goldszmidt. One skilled in the art would have been motivated to make the combination so that the identifiers can be used to group the streaming servers into two or more different sets (Goldszmidt, col. 5,

lines 38-42).

(Action at pages 16-17).

In item 8 of the Office Action, entitled Response to Arguments, the Examiner asserts Goldszmidt discloses that the control server assigns different identifiers to the streaming servers for delivering the multimedia data (Col. 5, lines 38-42) and the APA discloses a user session under TCP(an upper layer protocol) (see applicant's specification , pg. 7, line 23).

Applicants submit that even an *arguendo* combination does not teach recited features of claim 13. By contrast, Goldszmidt merely teaches:

The control server assigns different identifiers to the streaming servers for delivering the multimedia data, and uses these identifiers to group these streaming servers into two or more different sets. The streaming servers are used to deliver the real-time multimedia streams to the client agents. To receive a multimedia stream, client agents are given an identifier to connect to a server in one of the sets.

(see, for example, col. 3, lines 27-60).

That is, Goldszmidt merely teaches assigning different identifiers to streaming servers, and does not teach a technique in which different identifiers are assigned to streaming servers with an identifier corresponding to a session as a series of communications, as recited by claim 13.

Applicants submit that even an *arguendo* combination does not teach using an identifier as a source port number to a user session as a series of communications, as recited by claim 13.

Further, Applicant submits the recited elements in combination do not merely perform the function that each element performs separately, and the results of the claimed combination were unexpected.

## **Summary**

Since features recited by claim 13 are not taught by even a combination of the art relied on by the Examiner, the rejection should be withdrawn and claim 13 allowed.

## **Conclusion**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 10/751,730

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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